

**REPORT OF  
GEOTECHNICAL EXPLORATION**

**ZERO DUVAL SEAWALL  
TERMINUS OF DUVAL STREET  
KEY WEST, FLORIDA**

**FOR**

**CH2M HILL  
6410 5<sup>TH</sup> STREET, SUITE 2A  
KEY WEST, FLORIDA 33040**

**PREPARED BY**

**NUTTING ENGINEERS OF FLORIDA, INC.  
2051 NW 112<sup>TH</sup> AVE, SUITE 126  
MIAMI, FLORIDA 33072**

**ORDER NO. 126.21.2**

**FEBRUARY 2012**

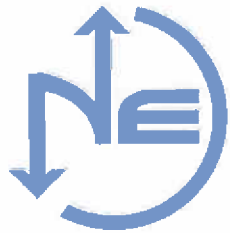


*Geotechnical & Construction Materials  
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# Nutting Engineers

of Florida Inc. | Established 1967

*Your Project is Our Commitment*

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February 23, 2012

Mr. Andrew Smyth  
CH2M Hill  
6410 5<sup>th</sup> Street, Suite 2A  
Key West, Florida 33040  
Phone: (305) 294-1645  
Fax: (305) 294-4913  
Email: [asmith@ch2m.com](mailto:asmith@ch2m.com)

Subject: Report of Geotechnical Exploration  
**Zero Duval Seawall**  
Terminus of Duval St.  
Key West, Florida

Dear Mr. Smyth:

Nutting Engineers of Florida, Inc. (NE), has performed a Geotechnical Exploration for the seawall replacement at the above referenced site in Key West, Florida. The purpose of this exploration was to obtain information regarding subsurface conditions at specific test locations in order to provide engineering parameters for the soils as part of the retaining wall design process. This report presents our findings and a brief geotechnical report based upon the information obtained.

## PROJECT INFORMATION

We understand that project plans call for the construction of a new sheet pile wall outside of the existing wall. Currently there is an existing bulkhead and large stormwater outfall penetration at the site. The water depth at the site ranges from approximately 9 to 12 feet with a maximum tidal variation of about 4 feet. The existing bulkhead is approximately 54 feet long. As this project is still in the early design stages, details concerning the type walls and construction methods have not been determined. NE should be notified in writing by the client of any changes in the proposed construction along with a request to amend our foundation analysis and/or recommendations within this report as appropriate.

## OFFICES

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## **GENERAL SUBSURFACE CONDITIONS**

### **Subsurface Exploration**

NUTTING ENGINEERS OF FLORIDA, INC. was requested to perform two Standard Penetration Test (SPT) borings (ASTM D-1586) to an elevation of -45 feet NGVD. The locations of the test borings are indicated on the Test Boring Location Plan presented in the Appendix of this report. The boring locations were identified in the field using approximate methods and available surface controls. As such the soil boring locations should be considered to be approximate.

### **Test Boring Results**

In general, the test boring on the water side of the existing bulkhead (B-1) revealed a water depth of approximately twelve feet, followed by one foot of loose limestone fragments and trace sand. From approximately thirteen feet to twenty three feet below water surface, the test boring noted very soft silt, followed by soft to medium hard limestone to fifty seven feet (-56 ft., NGVD), the maximum depth explored. We note that the boring was extended due to the very soft silt encountered.

The land side boring (B-2) generally revealed loose to medium dense sand and limestone fragments in varying portions to approximately twelve feet, followed by very soft silt to approximately seventeen feet below grade. Below the silt layer, very soft peat was noted to a depth of approximately twenty two feet, underlain by medium dense sand to approximately thirty three feet below grade. Below this layer, medium hard to hard limestone was observed to a depth of forty five feet (-42 ft., NGVD), the maximum depth explored.

One of the most important characteristics of the limestone formation encountered in this area is the degree of solution. The limestone is often times solufied and filled with unconsolidated sand or silt forming pockets during the geologic past. A detailed description of the soil/rock interlayering is given on the test boring logs in the Appendix.

### **Generalized Soil Parameters**

In order to analyze the loading conditions of seawall elements, the study of soil parameters for each stratum was conducted and obtained from the empirical correlations and our experiences based on the review of the field and lab test data. The parameters obtained include N value, internal friction angle ( $\phi$ ), and unit weight.

The following table, Table 1, presents the soil parameters for each stratum as well as generalized subsurface soil profiles as encountered at the proposed structure location. Details regarding the relatively complex interlayering of the subsoils are shown on the Soil Profile Sheet in the Appendix.

### General Subsurface Profiles and Soil Parameters (B-1 & B-2)

Approx. Depth* (Feet)	Soil Description	N-Values (Blows/ft)	Internal Friction Angle $\phi$ (degrees)	Submerged Unit Weight (pcf)	Consistency and Relative Density
12-13	SAND and LIMESTONE FRAGMENTS	9	30	47	Loose
13-23	SILT and/or PEAT	0-2	28	27	Soft
23-57	LIMESTONE, some fine to coarse sand	11-100+	-	62-67	Soft to Very Hard

\*measured from approximate water surface

### ANALYSIS AND RECOMMENDATIONS

The sheet piles should be installed in accordance with the local codes and good general practice by a competent sheet piling contractor familiar with local conditions. Rock fragments and/or pinnacles of limestone along with very soft silt and peat should be anticipated as part of the seawall. Difficult driving conditions should be anticipated once the soft to very hard limestone is encountered at depths of approximately 23 to 30 feet below the water surface. Discussions should be held between us, the owner, and the piling contractor regarding installation procedures.

In the event sheet piles are installed via vibration, it should be noted that vibratory installation of sheet piles and other construction equipment may cause vibrations that could be felt by persons within nearby buildings and could potentially induce cosmetic damage or structural settlements. Additionally, preexisting settlements may exist within these structures that could be construed to have been caused or worsened by the vibratory equipment after the fact. Pre- and post condition surveys of these structures along with vibration monitoring during installation could be performed to better evaluate this concern. The contractor should exercise due care during the installation with due consideration of potential impacts on existing structures.

Once the design and construction plans are more firmly established, we can provide more detailed input concerning geotechnical considerations for the project. We are available to discuss our findings and recommend discussions be held with us, the specialty contractor, designer and other interested parties as the project progresses.



## GENERAL INFORMATION

Our client for this geotechnical evaluation was:

CH2M Hill  
6410 5<sup>th</sup> Street, Suite 2A  
Key West, Florida 33040

The contents of this report are for the exclusive use of the client and the City of Key West for the purpose of the design package. Information conveyed in this report shall not be used or relied upon by other parties or for other projects without the expressed written consent of Nutting Engineers of Florida, Inc. This report discusses geotechnical considerations for this site based upon observed conditions and our understanding of proposed construction. Environmental issues including (but not limited to), soil and/or groundwater contamination are beyond our scope of service for this project. As such, this report should not be used or relied upon for evaluation of environmental issues.


If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office shall be notified immediately so that the condition or change can be evaluated and appropriate action taken.

The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with general accepted professional practice in the field of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

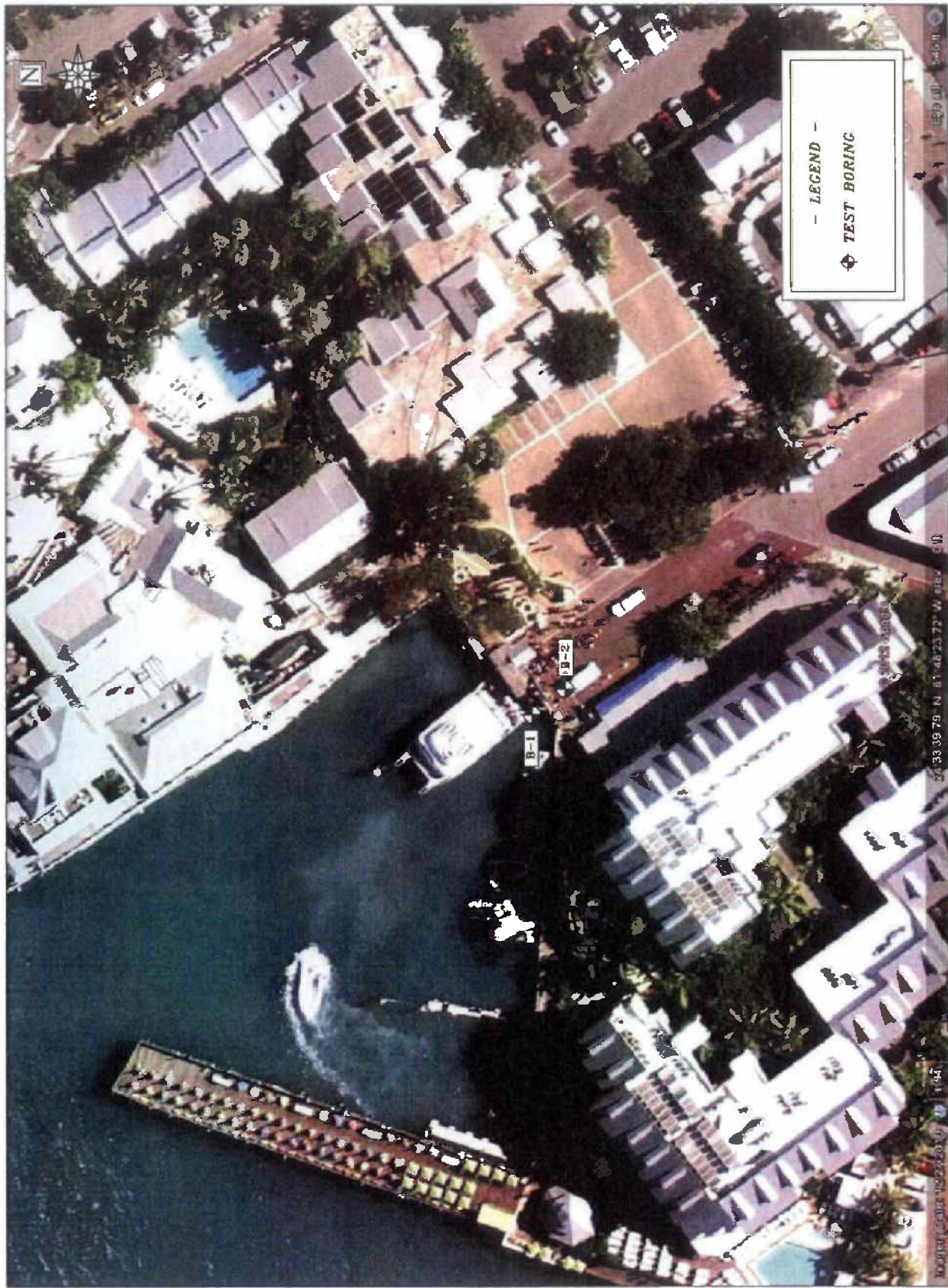
We appreciate the opportunity to provide these services for you. If we can be of any further assistance, or if you need additional information, please feel free to contact us.

Sincerely,  
**NUTTING ENGINEERS OF FLORIDA, INC.**

 2/23/12  
Paul C. Catledge, P.E. #68448  
Senior Engineer

  
Richard C. Wohlfarth, P.E.  
Director of Engineering

Appendix:    Boring Location Plan  
                  Soil Profiles  
                  Test Boring Logs  
                  Limitations of Liability  
                  Soil Classification Criteria



ZERO DUVAL SEAWALL  
TERMINUS OF DUVAL STREET  
KEY WEST, FLORIDA

APPROXIMATE  
TEST LOCATIONS

NOT TO SCALE

FIGURE 1









1310 Neptune Drive  
Boynton Beach, FL 33426  
Telephone: 561-736-4900  
Fax: 561-737-9975

# BORING NUMBER B-1

PAGE 1 OF 2

CLIENT CH2M Hill

PROJECT NUMBER 126.21.2

PROJECT NAME Site 2 - Zero Duval Seawall

PROJECT LOCATION Key West, FL

DATE STARTED 1/21/12 COMPLETED 1/21/12

SURFACE ELEVATION REFERENCE \_\_\_\_\_

DRILLING METHOD Standard Penetration Boring

GROUND WATER LEVELS: \_\_\_\_\_

LOGGED BY T. Simmons CHECKED BY C. Gworek

AT TIME OF DRILLING ---

APPROXIMATE LOCATION OF BORING As located on site plan

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲			
						10	20	30	40
						PL      MC      LL 20   40   60   80			
0		WATER				□ FINES CONTENT (%) □			
						20	40	60	80
5									
10									
12.5		Gray LIMESTONE FRAGMENTS, trace quartz fine SAND	SS 1	5-5-4-1	9	▲			
14		Gray SILT	SS 2	1/24"					
16			SS 3	1/24"					
18			SS 4	1/24"					
20			SS 5	1/12"-1-1					
22.5		Lt. tan porous coralline LIMESTONE, little quartz fine sand, trace brown peat	SS 6	1-20-17-10	37				▲
25		Lt. tan porous coralline LIMESTONE and silty quartz fine SAND	SS 7	5-7-4	11	▲			
30		Lt. tan porous coralline LIMESTONE, little quartz fine sand	SS 8	4-4-7	11	▲			
35			SS 9	10-17-14	31				▲
40		-Mud loss -38 to -56 NGVD							

TEST NUTTING BOREHOLE 2-126.21.2 CH2M HILL - SITE 2 ZERO DUVAL SEAWALL CPU GINT US GDT 2/23/12

(Continued Next Page)

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.



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 Fax: 561-737-9975

# BORING NUMBER B-1

PAGE 2 OF 2

PROJECT NUMBER 126.21.2

CLIENT CH2M Hill

PROJECT NAME Site 2 - Zero Duval Seawall

PROJECT LOCATION Key West, FL

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲			
						10	20	30	40
						PL	MC	LL	
						20	40	60	80
						□ FINES CONTENT (%) □			
						20	40	60	80
40		Lt. tan porous coralline LIMESTONE, trace quartz fine sand	X SS 10	53-57-46	103				>> ▲
45			X SS 11	21-20-23	43				▲
50			X SS 12	6-6-7	13	▲			
55		-Mud loss -38 to -56 NGVD	X SS 13	31-36-43	79				>> ▲
Boring terminated at -56' NGVD									

TEST NUTTING BOREHOLE 2-126.21.2 CH2M HILL - SITE 2 ZERO DUVAL SEAWALL.GPJ GINT US.GDT 2/23/12



1310 Neptune Drive  
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# BORING NUMBER B-2

PAGE 1 OF 2

PROJECT NUMBER 126.21.2

CLIENT CH2M Hill

PROJECT NAME Site 2 - Zero Duval Seawall

PROJECT LOCATION Key West, FL

DATE STARTED 1/25/12

COMPLETED 1/25/12

SURFACE ELEVATION REFERENCE +3' NGVD

DRILLING METHOD Standard Penetration Boring

GROUND WATER LEVELS:

LOGGED BY T. Simmons

CHECKED BY C. Gworek

☒ AT TIME OF DRILLING 2.0 ft

APPROXIMATE LOCATION OF BORING As located on site plan

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲			
						10	20	30	40
						PL	MC	LL	
						20	40	60	80
						□ FINES CONTENT (%) □			
						20	40	60	80
0		Lt. tan coralline Limestone fragments	1	23-34-28-31	62				>>▲
		Lt. gray quartz fine SAND, some limestone fragments	2	24-8-5-2	13		▲		
5		Lt. gray silty quartz fine SAND, little limestone fragments	3	2-1-3-3	4	▲			
		Lt. gray coralline Limestone fragments	4	4-3-8-51	11		▲		
10		Gray quartz fine SAND and shell	5	23-8-7-8	15		▲		
		Lt. tan quartz fine SAND and shell, little limestone fragments	6	7-5-1-1	6	▲			
		Gray SILT							
15			7	1-1-0	1	▲			
		Brown PEAT							
20			8	WR					
		Lt. tan silty quartz fine SAND, some limestone fragments							
25			9	7-15-11	26			▲	
30			10	4-5-8	13		▲		
35		Lt. tan porous coralline Limestone, some quartz fine sand	11	7-9-13	22			▲	
40			12	6-8-29	37				▲

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Disclaimer: Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.



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## BORING NUMBER B-2

PAGE 2 OF 2

PROJECT NUMBER 126.21.2

CLIENT CH2M Hill

PROJECT NAME Site 2 - Zero Duval Seawall

PROJECT LOCATION Key West, FL

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲			
						10	20	30	40
						PL	MC	LL	
40						20	40	60	80
						□ FINES CONTENT (%) □			
						20	40	60	80
		Lt. tan porous coralline LIMESTONE, some quartz fine sand (continued)							
45			13	50/1"	100+				>>
		Boring terminated at -42' NGVD							

TEST NUTTING BORING NO. 2 126.21.2 CH2M HILL - SITE 2 ZERO DUVAL SEAWALL GPJ GINT LS, GDT 2/23/12



## LIMITATIONS OF LIABILITY

### WARRANTY

We warrant that the services performed by Nutting Engineers of Florida, Inc. are conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession in our area currently practicing under similar conditions at the time our services were performed. **No other warranties, expressed or implied, are made.** While the services of Nutting Engineers of Florida, Inc. are a valuable and integral part of the design and construction teams, we do not warrant, guarantee or insure the quality, completeness, or satisfactory performance of designs, construction plans, specifications we have not prepared, nor the ultimate performance of building site materials or assembly/construction.

### SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test borings; test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report. This information is represented in the soil boring logs and/or a drawing. The location and elevation of the borings should be considered accurate only to the degree inherent with the method used and may be approximate.

The soil boring log includes sampling information, description of the materials recovered, approximate depths of boundaries between soil and rock strata as encountered and immediate depth to water data. The log represents conditions recorded specifically at the location where and when the boring was made. Site conditions may vary through time as will subsurface conditions. The boundaries between different soil strata as encountered are indicated at specific depths; however, these depths are in fact approximate and dependent upon the frequency of sampling, nature and consistency of the respective strata. Substantial variation between soil borings may commonly exist in subsurface conditions. Water level readings are made at the time and under conditions stated on the boring logs. Water levels change with time, precipitation, canal level, local well drawdown and other factors. Water level data provided on soil boring logs shall not be relied upon for groundwater based design or construction considerations.

### LABORATORY AND FIELD TESTS

Tests are performed in *general* accordance with specific ASTM Standards unless otherwise indicated. All criteria included in a given ASTM Standard are not always required and performed. Each test boring report indicates the measurements and data developed at each specific test location.

### ANALYSIS AND RECOMMENDATIONS

The geotechnical report is prepared primarily to aid in the design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it shall not be utilized to determine the cost of construction nor to stand alone as a construction specification. Contractors shall verify subsurface conditions as may be appropriate prior to undertaking subsurface work.

Report recommendations are based primarily on data from test borings made at the locations shown on the test boring reports. Soil variations commonly exist between boring locations. Such variations may not become evident until construction. Test pits sometimes provide valuable supplemental information that derived from soil borings. If variations are then noted, the geotechnical engineer shall be contacted in writing immediately so that field conditions can be examined and recommendations revised if necessary.

The geotechnical report states our understanding as to the location, dimensions and structural features proposed for the site. **Any significant changes of the site improvements or site conditions must be communicated in writing to the geotechnical engineer immediately** so that the geotechnical analysis, conclusions, and recommendations can be reviewed and appropriately adjusted as necessary.

### CONSTRUCTION OBSERVATION

Construction observation and testing is an important element of geotechnical services. The geotechnical engineer's field representative (G.E.F.R.) is the "owner's representative" observing the work of the contractor, performing tests and reporting data from such tests and observations. **The geotechnical engineer's field representative does not direct the contractor's construction means, methods, operations or personnel.** The G.E.F.R. does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on site. The G.E.F.R. is responsible for his/her safety, but has no responsibility for the safety of other personnel at the site. The G.E.F.R. is an important member of a team whose responsibility is to observe and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications. The enclosed report may be relied upon solely by the named client.

# SOIL AND ROCK CLASSIFICATION CRITERIA

## SAND/SILT

N-VALUE (bpf)	RELATIVE DENSITY
0 - 4	Very Loose
5 - 10	Loose
11 - 29	Medium
30 - 49	Dense
>50	Very dense
100	Refusal

## CLAY/SILTY CLAY

N-VALUE (bpf)	UNCONFINED COMP. STRENGTH (tsf)	CONSISTENCY
<2	<0.25	v. Soft
2 - 4	0.25 - 0.50	Soft
5 - 8	0.50 - 1.00	Medium
9 - 15	1.00 - 2.00	Soft
16 - 30	2.00 - 4.00	v. Stiff
>30	>4.00	Hard

## ROCK

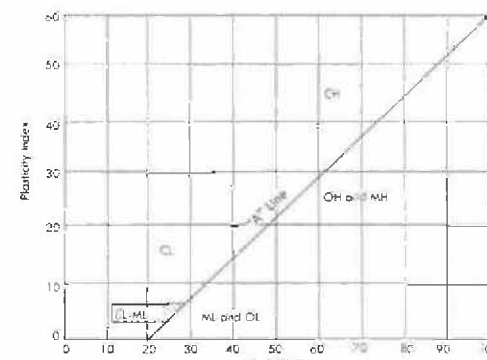
N-VALUE (bpf)	RELATIVE HARDNESS	ROCK CHARACTERISTICS
N ≥ 100	Hard to v. hard	Local rock formations vary in hardness from soft to very hard within short vertical and horizontal distances and often contain vertical solution holes of 3 to 36 inch diameter to varying depths and horizontal solution features. Rock may be brittle to split spoon impact, but more resistant to excavation.
25 ≤ N ≤ 100	Medium hard to hard	
5 ≤ N ≤ 25	Soft to medium hard	

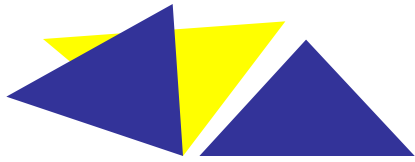
## PARTICLE SIZE

Boulder	>12 in.
Cobble	3 to 12 in.
Gravel	4.76 mm to 3 in.
Sand	0.074 mm to 4.76 mm
Silt	0.005 mm to 0.074 mm
Clay	<0.005 mm

## DESCRIPTION MODIFIERS

0 - 5%	Slight trace
6 - 10%	Trace
11 - 20%	Little
21 - 35%	Some
>35%	And

Major Divisions		Group Symbols	Typical names		Laboratory classification criteria		
Coarse-grained soils (More than half of material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:  Less than five percent.....GW, GP, SW, SP More than 12 percent.....GM, GC, SM, SC 5 to 12 percent.....Borderline cases requiring dual systems**	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3	
		Poorly graded gravels, gravel-sand mixtures, little or no fines	GP			Not meeting all gradation requirements for GW	
		Gravels with fines (Appreciable amount of fines)	GW*	Silty gravels, gravel-sand-silt mixtures		Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
			GC	Clayey gravels, gravel-sand-clay mixtures		Atterberg limits above "A" line with P.I. greater than 7	
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines		$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3	
			SP	Poorly graded sands, gravelly sands, little or no fines		Not meeting all gradation requirements for SW	
		Sands with fines (Appreciable amount of fines)	SM*	Silty sands, sand-silt mixtures		Atterberg limits below "A" line or P.I. less than 4	Limits plotting in hatched zone with P.I. between 4 and 7 are borderline cases requiring use of dual system.
			SC	Clayey sands, sand-clay mixtures		Atterberg limits above "A" line with P.I. more than 7	
		Fine-grained soils (More than half of material is smaller than No. 200 sieve size)	Silt and clays (Liquid limit less than 50)	ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	
				CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
	OL			Organic silts and organic silty clays of low plasticity			
	Silt and clays (Liquid limit greater than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts			
CH			Inorganic clays of high plasticity, fat clays				
OH			Organic clays of medium to high plasticity, organic silts				
Highly organic soils	PT		Peat and other highly organic soils				



**G. M. SELBY, Inc.**

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## **DUVAL STREET SEAWALL INSPECTION REPORT**



**October 2008**

## Introduction

G. M. Selby was contracted by the City of Key West to inspect the seawall located at the North end of Duval Street.

Selby inspected the site on three different occasions due to low visibility of the water column. No existing plans were found for the seawall, therefore Selby measured out the entire site to locate all necessary utilities and structures for the inspection and subsequent design of a replacement sea wall.

It was reported to Selby engineers that the seawall was not retaining the fill behind the wall. This was confirmed to us by the glass bottom boat Captain that works at the site on a daily basis.

## Sea Wall Condition

The seawall is for the most part not failing catastrophically, it is not falling into the water; however at each end (east and west) the engineer found holes and could feel the warm water from the upland seeping through. This was confirmed when the engineer compared the leakage flow to the flow of the outfall; the outfall flow was measured at one knot flow rate.

In addition, there are remnants of an older seawall which is heavily corroded with sharp protruding edges posing a danger to anyone entering the water under the deck. This oxidizing metal also contributes to an anodic reaction of metal objects such as vessels and other metallic components (bolts fasteners etc).

The outfall pipe located mid span of the seawall, was loose at the wall junction and a portion of its baffle or seal was loose and swaying in the water. Besides the sheet pile showing signs of corrosion, so did the pile cap, which exhibited cracking and discoloration from steel corroding from within.



It is very apparent that during storm events the fill behind the wall escapes via the holes at each end of the wall, thus contributing to the sinking of the road behind the wall at a few locations. At high tide (Spring tide) the water pressure actually causes a backflow and comes out of the inlet on Duval Street causing localized flooding. The engineer also noticed overtopping of the wall during extreme spring tide whereby the flow actually spills over the wall into the street.

On the east side, a pocket is formed where the wall makes a 90 degree turn. This area is prone to a resonance effect when swells are incoming due to boat wakes. This small area encounters the brunt of direct forces and has signs of long term erosion/abrasion. It is also an area where there are signs of water leaking out from the uplands contributing to the loss of fill behind the seawall.

The seawall does not seem to be in any danger of collapse. It has aged and is not functioning correctly as a retaining wall any longer, as such contributing to the sinking effect behind the wall, on the street.

## Evaluation of Alternative Solutions

Selby engineers researched the various options to provide a solution to stop the leakage and deterioration of the existing seawall. We analyzed the following solutions:

1. Form a concrete seawall in front of existing wall and pour it in place using high strength hydraulic marine concrete admixture.
2. Remove existing seawall and replace with a steel sheet piling wall.
3. Patch the wall
4. Install an aluminum sheet pile wall in front of the existing seawall with a hydraulic cement buffer.
5. The drawings depict two solution for the drainage/pollution control chamber before allowing runoff into the adjacent water.

## Recommendations

Selby engineers recommend removing the improvements above the wall, demolishing the cap and installing a new aluminum sheet pile wall in front of the existing wall. In addition, the contractor needs to

remove the old steel sheet piling remnants and install a baffle on the east side pocket area in order to dampen the wave energy.

Please see the attached drawings which show the entire new design of the wall, outfall and associated structures.

The other alternative solutions do not warrant consideration either due to logistics (concrete form) or due to unsatisfactory result vs. expenditure (patch). Removing the existing seawall could potentially cause failure of the adjacent upland as well as undermine adjacent structures and as such is ruled out as an option.

Gerald Zadikoff, PE  
FL 44206

## PHOTOGRAPHIC DOCUMENTATION



Inlet behind the wall not draining, notice the sinking of the brick.  
(Low to mid – tide)



View from the east side





View from the west side



Cracks in the Sea Wall Cap



Corroded Steel to be Removed



Old Corroded Steel East End



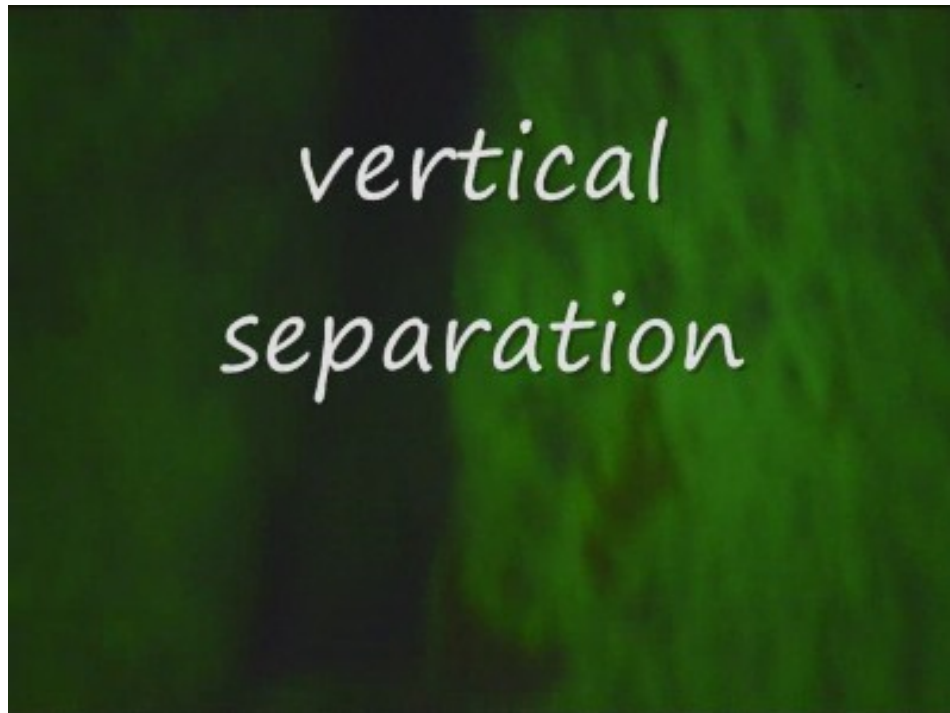
Area of High Wave Energy East End



Vertical Crack (separation)



Sheet Piling Under Deck



Vertical Separation



Cracks in Concrete Section West End





West End Hole



View of Sea Wall and Cap



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

South District Branch Office  
2796 Overseas Highway, Suite 221  
Marathon, FL 33050

RICK SCOTT  
GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

**VIA ELECTRONIC MAIL**

**Permittee/Authorized Entity:**

City of Key West  
3132 Flagler Avenue  
Key West, FL 33040

**Seawall Repair**

**Authorized Agent:**

CH2M Hill  
c/o Benjamin Brice  
1101 Channelside Drive, Suite 200 South  
Tampa, FL 33602  
[BBrice@ch2m.com](mailto:BBrice@ch2m.com)

**Environmental Resource Permit  
State-owned Submerged Lands Authorization – Granted**

**U.S. Army Corps of Engineers Authorization – Separate Corps  
Authorization Required**

Permit No.: 44-0300867-002  
Lease No. 44026265

**Permit Issuance Date: September 24, 2013  
Permit Construction Phase Expiration Date: September 24, 2018**

# **Consolidated Environmental Resource Permit and State-owned Submerged Lands Authorization**

**Permittee: City of Key West**

**Permit No: 44-0300867-002**

**Lease No: 44026265**

## **PROJECT LOCATION**

The activities authorized by this Permit and state-owned submerged lands authorization are located at 2 Duval Street, Key West, in Section 31, Township 67 South, Range 25 East, Monroe County; Parcel Id. No. 00072082-000400.

## **AUTHORIZATIONS**

### **Seawall repair**

#### Project Description

The permittee is authorized to repair an existing seawall within Man of War Harbor, a Class III Waterbody. Authorized activities are depicted on the attached drawings.

The project described above may be conducted only in accordance with the terms, conditions and attachments contained in this permit. The issuance of this permit does not infer, nor guarantee, nor imply that future permits or modifications will be granted by the Department.

Please be advised that this permit does not constitute the issuance of a NPDES Stormwater Permit or acceptance of an NPDES Stormwater Pollution Prevention Plan. For additional information regarding this matter please contact the NPDES Stormwater Notices Center toll free at (866) 336-6312 or Department personnel in Tallahassee at (850) 245-7522.

#### Sovereignty Submerged Lands Authorization

The activity is located on submerged lands owned by the State of Florida. It therefore also requires authorization, from the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 Florida Statutes (F.S.) and Chapter 258, F.S.

As staff to the Board of Trustees, the Department has determined that the activity qualifies for a Letter of Consent, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. During the term of this Letter of Consent you shall maintain satisfactory evidence of sufficient upland interest as required by paragraph 18-21.004(3)(b), Florida Administrative Code. If such interest is terminated or the Board of Trustees determines that such interest did not exist on the date of issuance of this Letter of Consent, this

Permittee: City of Key West

Permit No: 44-0300867-002

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Permit Expiration: September 24, 2018

Letter of Consent may be terminated by the Board of Trustees at its sole option. If the Board of Trustees terminates this Letter of Consent, you agree not to assert a claim or defense against the Board of Trustees arising out of this Letter of Consent.

By your acceptance of this Letter of Consent, you agree to be bound by the terms and conditions contained herein.

#### Federal Authorization

A copy of this permit has been sent to the U.S. Army Corps of Engineers (USACE). The USACE may require a separate permit. Failure to obtain any required federal permits prior to construction could subject you to enforcement action by that agency.

#### Coastal Zone Management

This permit also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Management Act.

#### Water Quality Certification

This permit constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

#### Other Authorizations

You are advised that authorizations or permits for this project may be required by other federal, state or local entities including but not limited to local governments and homeowner's associations. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

In addition, you are advised that your project may require additional authorizations or permits from the municipality/county in which the project is located. Please be sure to contact the local county building and environmental department to obtain these required authorizations.

#### **PERMIT/SOVEREIGNTY SUBMERGED LANDS CONDITIONS**

The activities described herein must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The General Consent Conditions for Sovereignty Submerged Lands Authorization**
- **The limits, conditions and locations of work shown in the attached drawings**
- **The term limits of this authorization**

You are advised to read and understand these conditions and drawings prior to commencing the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a contractor, the contractor also should read and understand these conditions and

drawings prior to commencing the authorized activities. Failure to comply with these conditions, including any mitigation requirements, shall constitute grounds for revocation of the Permit and appropriate enforcement action by the Department.

Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit/certification/authorization and sovereignty submerged lands authorization, as specifically described above.

## **SPECIFIC CONDITIONS**

1. All submittals of information required by this permit shall be submitted to the Department's Marathon office at 2796 Overseas Highway, Suite 221, Marathon, Florida 33050.
2. Best management practices for erosion control shall be implemented and maintained at all times to prevent siltation and turbid discharges in excess of State Water Quality Standards, pursuant to Rule 62-302, F.A.C. All practices shall be in accordance with the guidelines and specifications described in the Florida Erosion and Sedimentation Control Inspector's Manual, FDEP (2008), available on the Department's website at <http://www.dep.state.fl.us/water/nonpoint/docs/erosion/erosion-inspectors-manual.pdf>. Methods shall include, but are not limited to the immediate placement of turbidity containment devices such as turbidity screens, silt containment fences, and earthen berms, etc., to contain any potential erosion or turbidity. Earthen berms shall not impact wetlands or other surface waters as defined by Rule 62-340, F.A.C. Following the completion of construction, the Permittee shall be responsible for the removal of the turbidity barriers and shall correct any erosion or shoaling that has the potential to cause adverse impacts to wetlands or surface waters.
3. The project shall comply with applicable State Water Quality Standards of Chapter 62-302, F.A.C., namely:  
62-302.500 – Minimum Criteria for All Waters at All Times and All Places  
62-302.530 – Surface Water Quality Criteria
4. **No later than 60 days after construction commencement**, permanent manatee educational signs must be installed by the permittee. In the event the signs fade, become damaged or outdated, they must be replaced and maintained for the life of the facility. The on-site locations and types of signs must be acceptable to the Florida Fish and Wildlife Conservation Commission, which can be contacted at [ImperiledSpecies@myfwc.com](mailto:ImperiledSpecies@myfwc.com). The types of signs, sign vendors, and the process for FWC approval can be found at: <http://www.myfwc.com/wildlifehabitats/managed/manatee/signs/>.



5. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with, and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

6. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels shall follow routes of deep water whenever possible.

7. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers shall not impede manatee movement.

8. All on-site project personnel are responsible for observing water-related activities for the presence of manatees. All in-water operations, including vessels, shall be shutdown if a manatee comes within 50 feet of the operation. Activities shall not resume until every manatee has moved beyond the 50-foot radius of the project operation, or until 30 minutes has elapsed wherein a manatee has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.

9. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida.

10. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Awareness signs that have already been approved for this use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used. One sign measuring at least 3 ft. by 4 ft. which reads *Caution: Manatee Area* must be posted. A second sign measuring at least 8 1/2" by 11" explaining the requirements for "Idle Speed/No Wake" and the shutdown of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. Please see the Florida Fish and Wildlife Conservation Commission website for information on how to obtain appropriate signs:

[http://www.myfwc.com/docs/WildlifeHabitats/Manatee\\_EducationalSign.pdf](http://www.myfwc.com/docs/WildlifeHabitats/Manatee_EducationalSign.pdf)

11. In the event discrepancies exist between the permit drawings and the Specific Conditions of this permit, the Specific Conditions shall prevail.

*Note: In the event of an emergency, the Permittee should contact the Department by calling (800)320-0519. During normal business hours, the permittee should call (239)344-5600.*

## **GENERAL CONDITIONS:**

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and a violation of Part IV of Chapter 373, (F.S.).
2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by the Department staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
3. Activities approved by this permit shall be conducted in a manner which does not cause violations of state water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violations of state water quality standards. Temporary erosion control shall be implemented prior to and during construction and permanent control measures shall be completed within seven (7) days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving water-body exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter Six of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter, the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.
4. The permittee shall notify the Department of the anticipated construction start date within thirty (30) days of the date that this permit is issued. **At least forty-eight (48) hours prior** to commencement of the activity authorized by this permit, the permittee shall submit to the Department an "Environmental Resource Permit Construction Commencement" notice (Form No. 62-343.900(3), Florida Administrative Code (F.A.C.)) indicating the actual start date and expected completion date.
5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the Department on an annual basis utilizing an

“Annual Status Report Form” (Form No. 62-343.900(4), F.A.C.). Status Report Forms shall be submitted the following June of each year.

6. **Within thirty (30) days after completion of construction** of the permitted activity, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law utilizing the supplied “Environmental Resource Permit As-Built Certification by a Registered Professional” (Form No. 62-343.900(5), F.A.C.). The Statement of completion and certification shall be based on on-site observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the Department that the system is ready for inspection. Additionally, if deviations from the approved drawings are discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations note. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as “as-built” or “record” drawing. All surveyed dimensions and elevations shall be certified by a registered surveyor.

7. The operation phase of this permit shall not become effective; until the permittee has complied with the requirements of condition number six (6) above, has **submitted a “Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase” (Form 62-343.900(7), F.A.C.)**; the Department determines the system to be in compliance with the permitted plans and specifications; and the entity approved by the Department in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications Within the South Florida Water Management District – August 1995, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the Department, the permittee shall initiate transfer of permit to the approved responsible operation entity if different from the permittee. Until the permit is transferred pursuant to Rule 62-343.110(1) (d), F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.

9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the Department along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications Within the South Florida Water Management District— August 1995, prior to lot or unit sales or prior to lot or unit sales or prior to the completion of the system, whichever occurs first. Other documents concerning the establishment and authority of the operation entity must be filed with the Secretary of State where appropriate. For those systems which are proposed to be maintained by the county or municipal entities, final operation and maintenance documents must be received by the Department when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.

10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the Department in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.

11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C.

12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorization from the Board of Trustees prior to commencing activity on sovereignty lands or other state owned lands.

13. The permittee is advised that the rules of the South Florida Water Management District require the permittee to obtain a water use permit from the South Florida Water management District prior to construction dewatering, unless the work qualifies for a general permit pursuant to Rule 40E-20.302(4), F.A.C., also known as the "No Notice" rule.

14. The permittee shall hold and save the Department harmless from any and all damages, claims or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by this permit.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Section 373.421(2). F.S., provides otherwise.

16. The permittee shall notify the Department in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rule 62-343.130, F.A.C. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.

17. Upon reasonable notice to the permittee, Department authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.

18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate Department office.

19. The permittee shall immediately notify the Department in writing of and previously submitted information that is later discovered to be inaccurate.

#### **GENERAL CONDITIONS FOR SOVEREIGNTY SUBMERGED LANDS AUTHORIZATION**

Any use of sovereignty submerged lands is subject to the following general conditions are binding upon the permittee and are enforceable under Chapter 253, F.S., and, as applicable, Chapter 258, F.S.:

1. Sovereignty submerged lands may be used only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use will constitute a violation. Violation of the authorization shall result in suspension or revocation of the permittee's use of the sovereignty submerged land unless cured to the satisfaction of the Board of Trustees.



2. Authorization under Rule 18-21.005, F.A.C., convey no title to sovereignty submerged land or water column, nor does it constitute recognition or acknowledgment of any other person's title to such land or water.
3. Authorizations under Rule 18-21.005, F.A.C., may be modified, suspended or revoked in accordance with its terms or the remedies provided in Sections 253.04, F.S., and Chapter 18-14, F.A.C.
4. Structures or activities will be constructed and used to avoid or minimize adverse impacts to resources.
5. Construction, use, or operation of the structure or activity will not adversely affect any species which is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004, and 68A-27.005, F.A.C.
6. Structures or activities shall not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity will be modified in accordance with the court's decision.
7. Structures or activities will not create a navigational hazard.
8. Structures will be maintained in a functional condition and will be repaired or removed if they become dilapidated to such an extent that they are no longer functional.
9. Structures or activities will be constructed, operated, and maintained solely for water dependent purposes.
10. The permittee agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the permittee's use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.
11. Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.

12. Permittee binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the permittee or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the permittee or its successors or assigns. Upon receipt of such notice, the permittee or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.

13. All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the permittee. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The permittee will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.

14. This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

## **NOTICE OF RIGHTS**

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice.

### Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rule 28-106.201, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;

- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action; and
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Also, a copy of the petition shall be mailed to the permittee at the address indicated above at the time of filing.

#### Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the permittee must be filed with 14 days of receipt of this written notice. Petitions filed by any persons other than the permittee, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition with 14 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

#### Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

### Mediation

Mediation is not available in this proceeding.

### FLAWAC Review

The permittee, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when the order is filed with the Clerk of the Department.

### Judicial Review

Any party to this action has the right to seek judicial review pursuant to section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal.

[this portion intentionally left blank]

The Notice of Appeal must be filed with 30 days from the date this action is filed with the Clerk of the Department.

Executed in Monroe County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



For: \_\_\_\_\_

Jon M. Iglehart  
District Director  
South District Office

JMI/ch

**Attachments:**

Project Drawings, 4 pages

Commencement notice /62-343.900(3)\*

Annual status report/62-343.900(4)\*

As-built certification/62-343.900(5)\*

Inspection certification/62-343.900(6)\*

Transfer construction to operation phase/ 62-343.900(7)\*

Application for transfer of an ERP permit/62-343.900(8)\*

\*Can be downloaded at: <http://www.dep.state.fl.us/water/wetlands/erp/forms.htm>

**Copies furnished to:**

U.S. Army Corps of Engineers, Miami /Florida Fish and Wildlife Conservation Commission

Monroe County Property Appraiser

Florida Keys National Marine Sanctuary

Sue Jones & Yanett Langley, FDEP

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this permit and authorization to use sovereignty submerged lands, including all copies, were mailed before the close of business on September 24, 2013, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under 120.52(7) of the  
Florida Statutes, with the designated Department Clerk,  
receipt of which is hereby acknowledged.



September 24, 2013

Clerk

Date

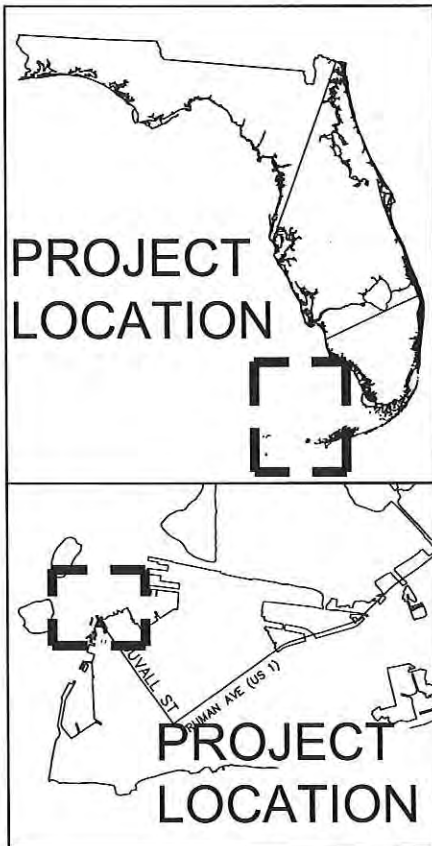
Permittee: City of Key West

Permit No: 44-0300867-002

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Permit Expiration: September 24, 2018





PERMIT DRAWINGS  
NOT FOR CONSTRUCTION



PROJECT  
LOCATION

FLUCCS  
5100

Jon Casey Long  
MAY 8 1 2013  
Professional Engineer  
State of Florida Registration No. 56083

SCALE: 1"=125'



PLOTTED: -  
TIME: -  
PLOT SCALE: -  
DESIGNED: -  
DRAWN: -  
CHECKED: -  
APPROVED: -  
DATE: -

Duval Bulkhead Repair  
CITY OF KEY WEST  
KEY WEST, FLORIDA  
PLAN VIEW

**CH2MHILL**

4350 W Cypress  
Suite # 600  
Tampa, Florida  
33607

JOB No. 439197.B1.01  
CAD FILE  
SHEET NUMBER  
P1  
SHEET OF



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION



-10  
-9  
-8  
-7

EXISTING  
WOOD DECK  
TO BE  
TEMPORARILY  
REMOVED

EXISTING  
WOODEN PILES

EXISTING CONCRETE  
SHEET PILE WALL (TO  
REMAIN - TYP)

EXISTING OLD  
STEEL SHEET  
PILE WALLS  
(TO REMAIN)

DUVAL ST

Jon Casey Long

MAY 01 2013

Professional Engineer

State of Florida Registration No. 56083

SCALE: 1"=80'



PLOTTED: -  
TIME: -  
PLOT SCALE: -  
DESIGNED: -  
DRAWN: -  
CHECKED: -  
APPROVED: -  
DATE: -

Duval Bulkhead Repair  
CITY OF KEY WEST  
KEY WEST, FLORIDA

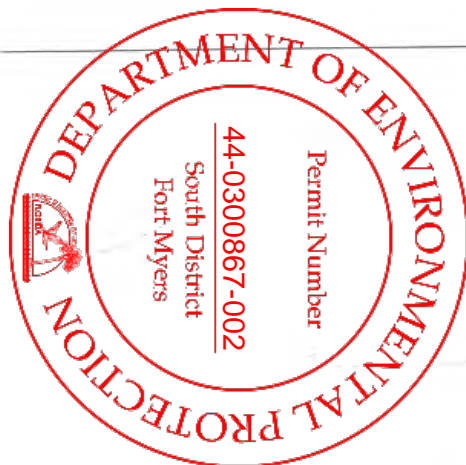
DUVAL STREET BULKHEAD EXISTING CONDITION

**CH2MHILL**

4350 W Cypress  
Suite # 600  
Tampa, Florida  
33607

JOB No. 439197.B1.01  
CAD FILE  
SHEET NUMBER  
P2  
SHEET OF





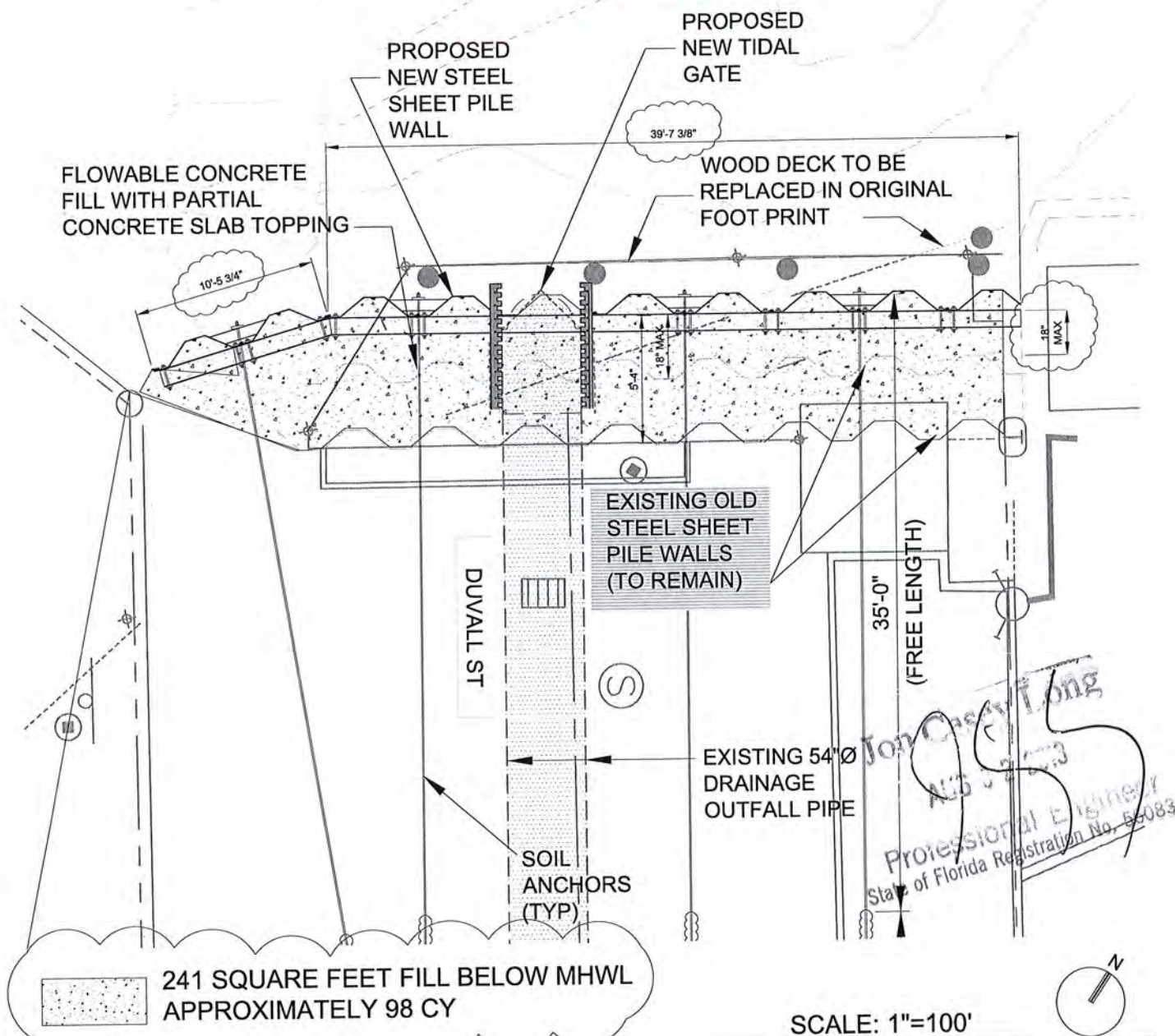
# PERMIT DRAWINGS NOT FOR CONSTRUCTION

RECEIVED

AUG 22 2013

D.E.P. Marathon

REVISED



241 SQUARE FEET FILL BELOW MHWL  
APPROXIMATELY 98 CY

SCALE: 1"=100'



PLOTTED: -  
TIME: -  
PLOT SCALE: -  
DESIGNED: -  
DRAWN: -  
CHECKED: -  
APPROVED: -  
DATE: -

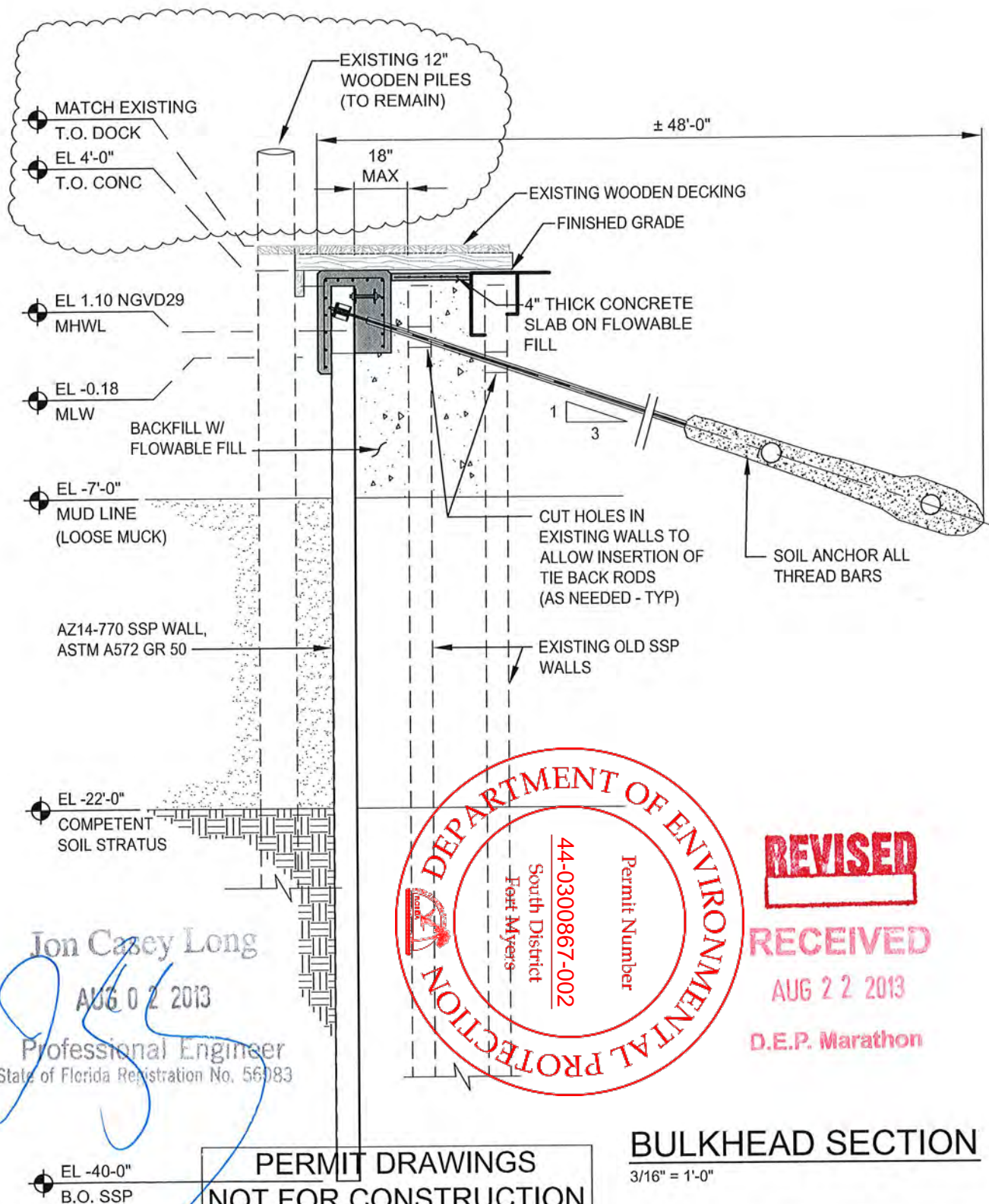
Duval Bulkhead Repair  
CITY OF KEY WEST  
KEY WEST, FLORIDA

DUVALL STREET BULKHEAD PLAN VIEW

**CH2MHILL**

4350 W Cypress  
Suite # 600  
Tampa, Florida  
33607

JOB No. 439197.B1.01  
CAD FILE  
SHEET NUMBER  
P3  
SHEET OF



Jon Casey Long  
AUG 02 2013  
Professional Engineer  
State of Florida Registration No. 56083

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Duval Bulkhead Repair  
CITY OF KEY WEST  
KEY WEST, FLORIDA  
DUVALL STREET BULKHEAD SECTION

**CH2MHILL**  
4350 W Cypress  
Suite # 600  
Tampa, Florida  
33607

JOB No. 439197.B1.01  
CAD FILE  
SHEET NUMBER  
P4  
SHEET OF



DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
9900 SOUTHWEST 107<sup>TH</sup> AVENUE, SUITE 203  
MIAMI, FLORIDA 33176

REPLY TO  
ATTENTION OF

Regulatory Division  
South Permits Branch  
Miami Permits Section  
SAJ-2013-01387 (NW-IF)

NOV 21 2013

City of Key West  
c/o Bogdan Vitas Jr., City Manager  
3132 Flagler Ave  
Key West, FL 33040

Dear Mr. Bogdan:

The U.S. Army Corps of Engineers (Corps) assigned your application for a Department of the Army (DA) permit, which the Corps received on May 10, 2013, the file number SAJ-2013-01387 (NW-IF). A review of the information and drawings provided indicates that the proposed work would result in the repair/rehabilitation of an existing, dilapidated steel sheetpile bulkhead; specifically, to remove the deckboards and stringers associated with an existing marginal wood dock (dock support piles will remain in-place); to install 50 linear feet of new cantilevered steel king sheetpile bulkhead and associated concrete cap 18 inches waterward of the original dilapidated bulkhead; place 98 cubic yards of backfill within a 241 square-foot area landward of the new bulkhead; replace the marginal dock deckboards and stringers within the previously existing footprint after the new bulkhead is installed; and temporarily deploy turbidity curtains for the duration of all in-water activities.

The project is located at the northern end of Duval Street adjacent to the Man of War Harbor at 402 Wall Street; in Section 31, Township 67 South, Range 25 East in Key West, Monroe County, Florida 33041 (SSLL# 44026265).

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) Number 3. In addition, project specific conditions have been enclosed. This verification is valid until **March 18, 2017**. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit. Please access the U.S. Army Corps of Engineers, Jacksonville District's Regulatory Internet page to access Internet links to view the Final Nationwide Permits, Federal Register Vol. 77, dated February 21, 2012, specifically pages 10270 – 10290, the Corrections to the Final Nationwide Permits, Federal Register 77, March 19, 2012, and the List of Regional Conditions. The Internet page address is:

<http://www.saj.usace.army.mil/Missions/Regulatory.aspx>



Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there you will need to click on "Source Book"; and, then click on "Nationwide Permits." These files contain the description of the Nationwide Permit authorization, the Nationwide Permit general conditions, and the regional conditions, which apply specifically to this verification for NWP 3. Enclosed is a list of the six General Conditions, which apply to all DA authorizations. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification may be required.

The following special conditions are included with this verification:

**1. Self-Certification:** Within 60 days of completion of the work authorized, the attached *Self-Certification Statement of Compliance* must be completed and submitted to the U.S. Army Corps of Engineers. Mail the completed form to the Regulatory Division, Special Projects and Enforcement Branch, 9900 Southwest 107<sup>th</sup> Avenue, Suite 203, Miami, Florida 33176. The Permittee shall reference this permit number, SAJ-2013-01387 (NW-IF), on all submittals.

**2. Best Management Practices:** Environmental controls and best management practices must be implemented to properly contain construction materials and prevent fugitive particulates from entering surrounding waters during the construction of the project.

**3. Manatee Conditions:** The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work – 2011," attached to this permit.

**4. Sea Turtle and Smalltooth Sawfish Conditions:** The Permittee shall comply with National Marine Fisheries Service's "Sea Turtle and Smalltooth Sawfish Construction Conditions," dated March 23, 2006, attached to this permit.

**5. Posting of permit:** The Permittee shall ensure that all contractors, sub-contractors, and entities associated with the implementation of the project review, understand, and comply with the approved plans and special conditions made part of this permit. Complete copies of the permit and approved plans shall be available at the construction site at all times. Failure to comply with the approved plans and permit special conditions may subject the Permittee to enforcement action.

**6. Florida Fish and Wildlife Conservation Commission (FWC) Condition:** No later than 60 days after construction commencement, permanent manatee educational signs must be installed by the permittee/lessee. In the event the signs fade, become damaged or outdated, they must be replaced and maintained for the life of the facility. The on-site locations and types of signs must be acceptable to the FWC, which should be contacted at [ImperiledSpecies@myfwc.com](mailto:ImperiledSpecies@myfwc.com) <<mailto:ImperiledSpecies@myfwc.com>> . The types of signs, sign vendors, and the process for FWC approval can be found at: <http://www.myfwc.com/wildlifehabitats/managed/manatee/signs/>.



## **7. Cultural Resources/Historic Properties:**

a. No structure or work shall adversely affect impact or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition ; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

**8. Regulatory Agency Changes:** Should any other regulatory agency require changes to the work authorized or obligated by this permit, the Permittee is advised that a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Miami Regulatory Office.

This letter of authorization does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife

species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage (<http://www.myfwc.com/license/wildlife/>) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (<http://www.fnai.org/>) also maintains updated lists, by county, of documented occurrences of those species.

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact Ivan Fannin by telephone at 305-779-6053.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to visit <http://per2.nwp.usace.army.mil/survey.html> and complete our automated Customer Service Survey. Your input is appreciated – favorable or otherwise. Again, please be aware this Internet address is case sensitive and should be entered as it appears above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ivan Fannin', with a stylized flourish at the end.

Ivan Fannin  
Project Manager

Enclosures:

1. General Conditions
2. Standard Manatee Conditions for In-Water Work
3. Sea Turtle and Smalltooth Sawfish Construction Conditions
4. Self-Certification
5. ACOE site plans date-stamped 11/21/2013
6. Transfer Request

Copy/ies Furnished:

1. Benjamin Brice, CH2M Hill, agent (email)
2. CESAJ-RD-PE

GENERAL CONDITIONS

33 CFR PART 320-330

PUBLISHED FEDERAL REGISTER DATED 13 NOVEMBER 1986

1. The time limit for completing the work authorized ends on **March 18, 2017**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

## STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at [ImperiledSpecies@myFWC.com](mailto:ImperiledSpecies@myFWC.com)
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at [MyFWC.com/manatee](http://MyFWC.com/manatee). Questions concerning these signs can be sent to the email address listed above.

# CAUTION: MANATEE HABITAT

**All project vessels**

## **IDLE SPEED / NO WAKE**

When a manatee is within 50 feet of work  
all in-water activities must

## **SHUT DOWN**

Report any collision with or injury to a manatee:



**Wildlife Alert:**

**1-888-404-FWCC(3922)**

cell \*FWC or #FWC





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
263 13th Avenue South  
St. Petersburg, FL 33701

## SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



**SELF-CERTIFICATION STATEMENT OF COMPLIANCE**

**Permit Number: SAJ-2013-01387 (NW-IF)**

Permittee's Name & Address (please print or type): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Location of the Work: \_\_\_\_\_

\_\_\_\_\_

Date Work Started: \_\_\_\_\_ Date Work Completed: \_\_\_\_\_

Description of the Work (e.g. bank stabilization, residential or commercial filling, docks, dredging, etc.):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Acreage or Square Feet of Impacts to Waters of the United States: \_\_\_\_\_

Describe Mitigation completed (if applicable): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Describe any Deviations from the Permit (attach drawing(s) depicting the deviations):

\_\_\_\_\_  
\_\_\_\_\_

I certify that all work, and mitigation (if applicable), was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date



Project Location  
Zero Duvall

0 25 50  
Feet



**ATTACHMENT E**  
**PROJECT AERIAL**  
ZERO DUVALL  
CITY OF KEY WEST  
FLORIDA

US ARMY  
CORPS OF ENGINEERS

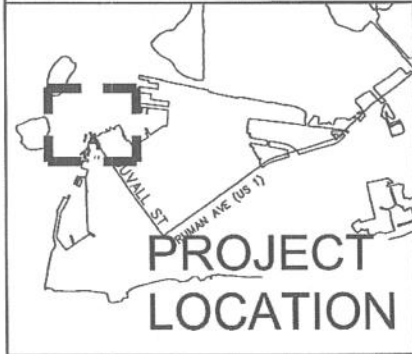
105 NOV 21 2013

CH2MHILL  
MIAMI REGULATORY OFFICE

COE #: 2013-01387  
PROJECT MANAGER: JWF

PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

PROJECT  
LOCATION



PROJECT  
LOCATION

PROJECT  
LOCATION

US ARMY  
CORPS OF ENGINEERS

NOV 21 2013

2065

MIAMI REGULATORY OFFICE

COE #: 2013-01387  
PROJECT MANAGER: JCL

Jon Casey Long

MAY 8 1 2013

Professional Engineer  
State of Florida Registration No. 56083

SCALE: 1"=125'



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Duval Bulkhead Repair  
CITY OF KEY WEST  
KEY WEST, FLORIDA

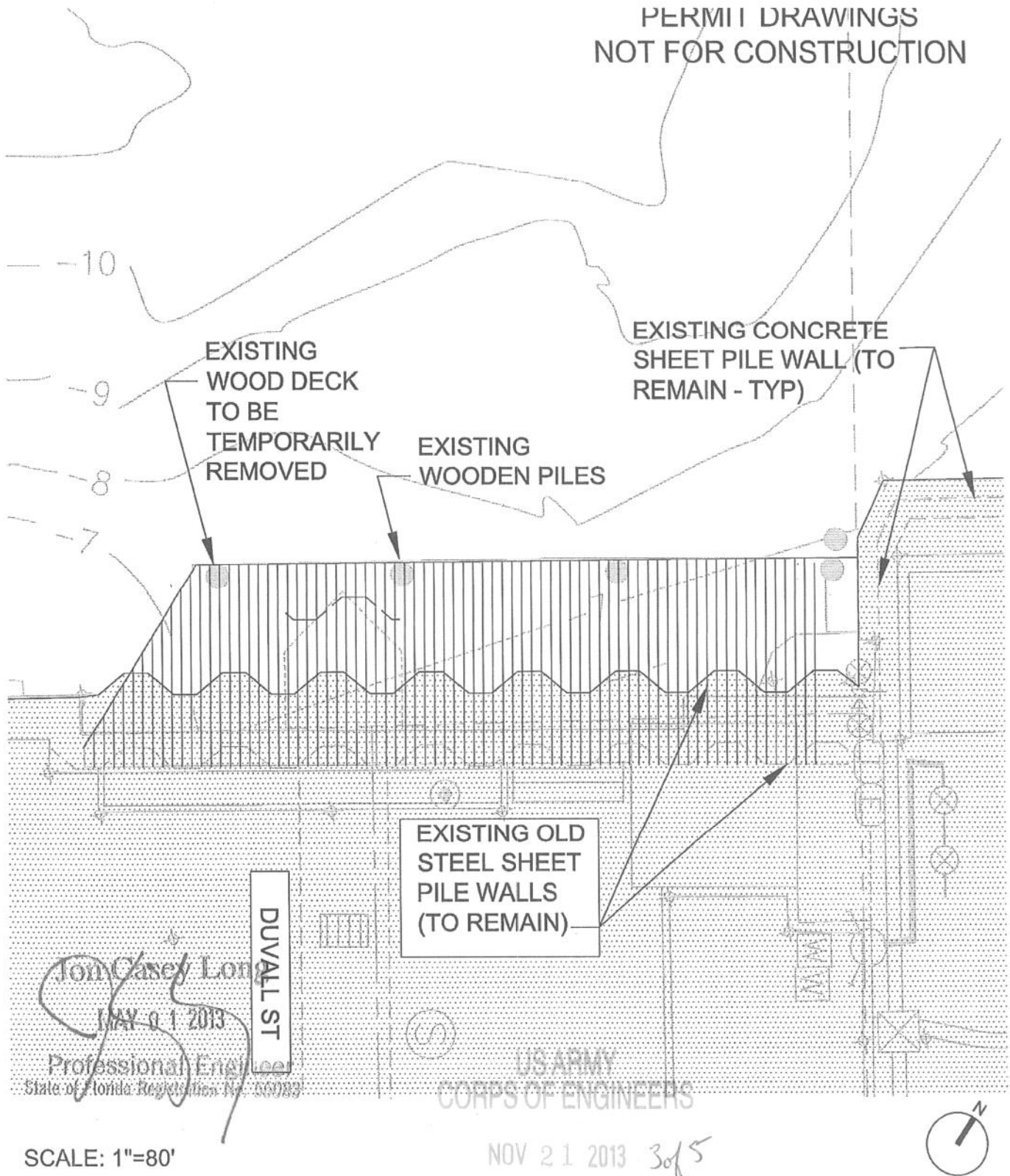
PLAN VIEW

**CH2MHILL**

4350 W Cypress  
Suite # 600  
Tampa, Florida  
33607

JOB No. 439197.B1.01  
CAD FILE  
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P1  
SHEET OF

PERMIT DRAWINGS  
NOT FOR CONSTRUCTION



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NOV 21 2013 3:05

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Duval Bulkhead Repair  
CITY OF KEY WEST  
KEY WEST, FLORIDA

DUWALL STREET BULKHEAD EXISTING CONDITION

MIAMI REGULATORY OFFICE

COE #: 2013-01387  
PROJECT MANAGER: JLF

**CH2MHILL**

4350 W Cypress  
Suite # 600  
Tampa, Florida  
33607

JOB No. 439197.B1.01  
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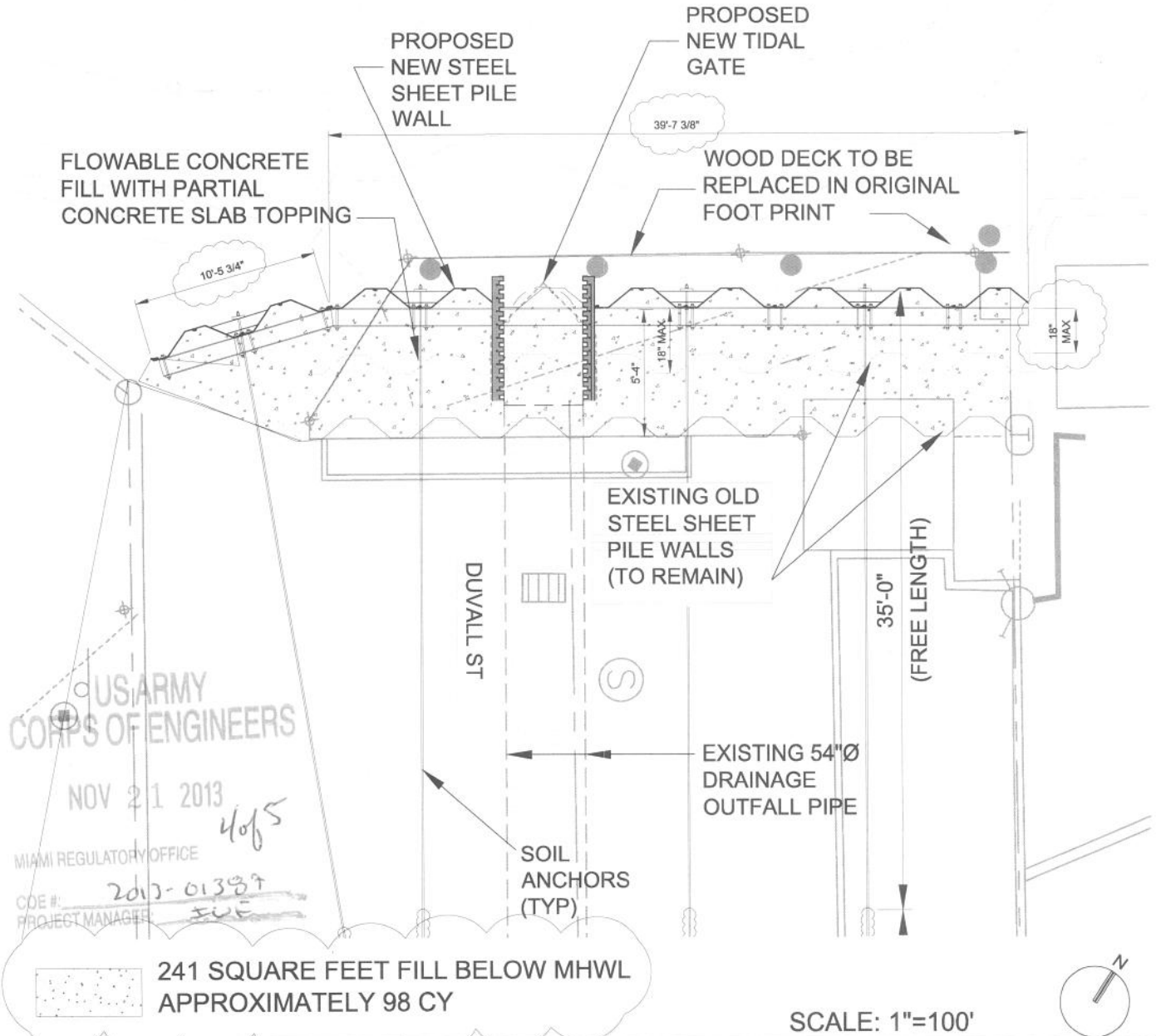
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SHEET OF



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION



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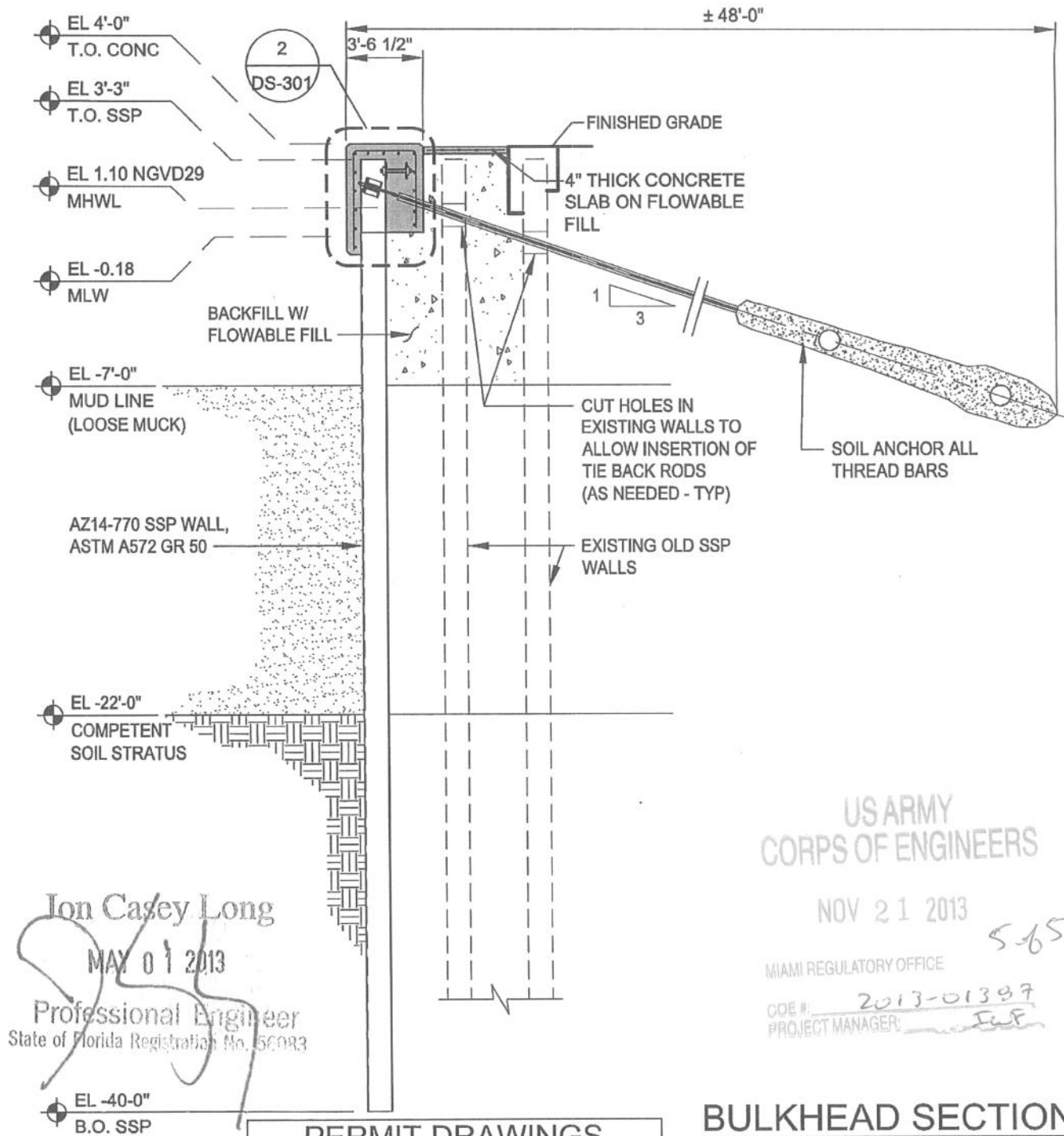
Duval Bulkhead Repair  
CITY OF KEY WEST  
KEY WEST, FLORIDA  
DUVALL STREET BULKHEAD PLAN VIEW

**CH2MHILL**

4350 W Cypress  
Suite # 600  
Tampa, Florida  
33607

JOB No: 439197.B1.01  
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SHEET NUMBER  
P3  
SHEET OF





Ion Casey Long  
 MAY 01 2013  
 Professional Engineer  
 State of Florida Registration No. 56083

US ARMY  
CORPS OF ENGINEERS

NOV 21 2013

MIAMI REGULATORY OFFICE

COE #: 2013-01397  
 PROJECT MANAGER: JLF

PERMIT DRAWINGS  
 NOT FOR CONSTRUCTION

BULKHEAD SECTION  
 3/16" = 1'-0"

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 APPROVED: -  
 DATE: -

Duval Bulkhead Repair  
 CITY OF KEY WEST  
 KEY WEST, FLORIDA  
 DUVALL STREET BULKHEAD SECTION

**CH2MHILL**  
 4350 W Cypress  
 Suite # 600  
 Tampa, Florida  
 33607

JOB No. 439197.B1.01  
 CAD FILE  
 SHEET NUMBER  
 P4  
 SHEET OF

**DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST**

**PERMIT NUMBER: SAJ-2013-01387 (NW-IF)**

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019.

\_\_\_\_\_  
(TRANSFeree-SIGNATURE)

\_\_\_\_\_  
(SUBDIVISION)

\_\_\_\_\_  
(DATE)

\_\_\_\_\_  
(LOT)

\_\_\_\_\_  
(BLOCK)

\_\_\_\_\_  
(NAME-PRINTED)

\_\_\_\_\_  
(STREET ADDRESS)

\_\_\_\_\_  
(MAILING ADDRESS)

\_\_\_\_\_  
(CITY, STATE, ZIP CODE)